

IN THE APPLICATION

OF

Isaiah Moore, Jr.

FOR

Apparatus and Methods for Batting Practice
And Playing Baseball

FILED WITH

THE UNITED STATES PATENT AND TRADEMARK OFFICE

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-1- Moore Jr., Doc.No. IM-1, 22 Oct. 2000

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates generally to baseball and, more specifically, to methods and apparatus for improving player batting averages and playing the game with substitute apparatus.

Description of the Prior Art

There are other ball type games, apparatus and methods designed for practice, sport, or past time leisure. Typical of these is U.S. Patent No. 3,994,497 issued to Cordingley on November 30, 1976. (MA)

Another patent was issued to Newcomb et al. on September 1, 1981 as U.S. Patent No. 4,286,783. Yet another U.S. Patent No. 4,522,396 was issued to Girard et al. on July 11, 1985 and still yet another was issued on July 8, 1986 to Ventura et al. as U.S. Patent No. 4,598,909. (MA) (MA) (MA)

Another patent was issued to Schanwald on September 30, 1986 as U.S. Patent No. 4,614,339. Yet another U.S. Patent No. 4,991,838 was issued to Groves on February 12, 1991. Another was issued to Hope, II on September 21, 1993 as U.S. Patent No. 5,246,228 and still yet another was issued on January 28, 1997 to Haygood et al. as U.S. Patent No. 5,597,159. (MA) (MA)

Another patent was issued to Howland on October 13, 1998 as U.S. Patent No. 5,820,495. Yet another U.S. Patent No. 5,827,138 was issued to Barrett on October 27, 1998. Another was issued to Cinnella on November 16, 1999 as U.S. Patent No. 5,984,813. (MA) (MA)

U.S. Patent Number 3,994,497

Inventor: Richard P. Cordingley

Issued: November 30, 1976

A baseball-like game apparatus includes a playing surface marked to define a triangular area defining a pair of foul lines and a defensive base line. Indicia are located within the triangle to define the placement location of case or other objects which can be knocked over in a general T-shaped configuration. The defensive team stands behind the base line and pitches the ball to the batter who attempts to hit the ball with the bat to knock over the cans.

U.S. Patent Number 4,286,783

Inventor: Nelson F. Newcomb et al.

Issued: September 1, 1981

A practice baseball constructed to curve to a controllable degree when thrown in the manner that a conventional baseball is thrown as a straight ball. The practice baseball is in major part spherical, the balance of the surface being a flat area resulting from the removal of a small segment. The practice baseball has all of the normal characteristics of any conventional similarly manufactured baseball of the same diameter and weight. The practice baseball may be of any selected weight and diameter between the limits recited hereinafter and more specifically, it will be of the same weight and diameter as that of any fully spherical baseball but of greater specific gravity resulting from the reduction in volume due to the removed segment. When hit with a conventional baseball bat, the practice baseball responds as to "crack□" sound and the distance traveled like a conventional fully spherical baseball. The weight of the practice ball is between 1 ¼ and 7 ounces and

the major diameter of its spherical part is between 2 and 4 inches.

U.S. Patent Number 4,522,396

Inventor: Thomas L. Girard et al.

Issued: June 11, 1985

A ball for use in an indoor or outdoor baseball-type game played by a small number of players in a playing field of limited size. The ball is pitched by a defensive player to an offensive player who tries to strike the ball with an elongated bat. The ball weighs less than 2 ounces and is made of a resilient, low mass material of generally spherical configuration with an outside diameter of at least 2 inches, and having a plurality of interconnecting concave indentations thereon. The width of each of the indentations is at least 1/8 inch. The bat contains a longitudinal bore in the ball such that when the end of the bat is pressed against the ball, the ball is forced into bore and retained therein until removed by a player.

U.S. Patent Number 4,598,909

Inventor: Frank D. Ventura et al.

Issued: July 8, 1986

A game ball is comprised of an outer layer of foamed polyurethane plastic having a density of approximately 15 pounds per cubic foot, the layer having an external integral skin having a density of 20-30 pounds per cubic foot providing a protective cover and an integral inner skin having a density of 20-30 pounds per cubic foot providing a cavity in which a core ball of resilient material is contained. The core ball has a density of 70-76 pounds per cubic foot and a lesser degree of compressibility than the foamed layer of polyurethane plastic. The core ball is lubricated by carbon contained in the core ball when fabricated from natural rubber and by means of a lubricating film when fabricated from natural rubber and polybutadiene so that in either case the core ball is free to move or shift within the cavity when the baseball is impacted by the bat.

U.S. Patent Number 4,614,339

Inventor: Stephen M. Schanwald

Issued: September 30, 1986

A batting practice baseball has a circumference and a diameter in the range of from approximately 65 % to approximately 90% of the circumference and diameter of a regular or official league baseball sanctioned for use in league games by Rule 1.09 of the Official Baseball Rules. Preferably, the circumference of the batting practice ball is in the range of from 5.85 inches to 8.33 inches, and the outer diameter is in the range of 1.86 inches to 2.65 inches. The weight of the batting practice baseball is the same as the weight of an official baseball; and the resilience of the batting practice baseball should be the same as or equivalent to the resilience of an official baseball. This is achieved by constructing the batting practice baseball with materials and yarn tension sufficient to provide a coefficient of restitution in the range of from approximately 51.4% to approximately 57.8%. Use of the comparatively smaller batting practice baseball during batting practice should

improve the batting skills of a player and make the task of hitting the comparatively larger official baseball in a game situation much easier.

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U.S. Patent Number 4,991,838

Inventor: Keith N. Groves

Issued: February 12, 1991

A new type of baseball suited for use as a training aid, particularly for pitchers, catchers, and hitters comprising a conventional baseball having a colored lined marking on the cover, and preferably a red colored stripe spiraling downward from the top of the ball to the bottom.

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U.S. Patent Number 5,246,228

Inventor: Wayne A. Hope, II

Issued: September 21, 1993

Ins A1 An apparatus for playing and a method of playing the ball type game called "Buntball" is disclosed. The game is characterized as being suitable for play by persons of differing skill, gender, or age and of being safe to play indoors or outdoors. The apparatus comprises a rectangular playing field without walls or ceiling, a homeplate in front of the playing field, a bat, and ball. The playing field includes four subareas, and is preferably sixteen feet wide and twenty-four feet deep. Homeplate is preferably twelve feet away from the playing field. The bat and ball are preferably hollow and the ball is preferably perforated with small openings. The players are equally partitioned into two teams, each having at least one player. One team is positioned on the playing field with the goal of catching balls bunted thereto by a batter on the other team. The members of the team not on the playing field, attempt, one at a time, to bunt balls pitched by a member of the team on

to the playing field without having it caught. If a ball is bunted onto the playing field without being caught, the subarea where the ball lands determines the number of imaginary bases that are advanced by an imaginary runner. Rules for playing Buntball are disclosed.

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U.S. Patent Number 5,597,159

Inventor: James G. Haygood et al.

Issued: January

A batting practice device which has a partially hollowed-out practice ball suspended by a knotted rope, or a line having a flared-out end, from a handle. The batting practice device is used to swing a practice ball with a removable cap in front of batters to help them develop the eye-to- hand coordination needed to hit balls pitched to them during a game. The batting practice device has a combination of universal joints, elastic material, and springs located between the handle and the practice ball to help absorb most of the energy transferred to the practice ball after it has been hit by a bat. Applications may include, but are not limited to, baseball, softball, wiffle ball and cricket. It is contemplated for the batting practice device to be used by inexperienced players, as well as college and professional players.

U.S. Patent Number 5,820,495

Inventor: Kevin Michael Howland

Issued: October 13, 1998

A training ball for use by a pitcher in practicing throwing a curve ball and a method for using the training ball as described. The training ball has a first ball having approximately the size, weight, and surface of a regulation baseball, for being held and thrown by the pitcher, and a counter weight connected to the first ball at a fixed distance and position, to provide a mass balancing the mass of the first ball at a balance point approximately at the surface of the sphere defined by the surface of the first ball. The first ball may be a modified regulation baseball. The counterweight may be a second ball approximately identical in size and weight to the first ball. The method for using a training ball includes gripping and throwing the first ball as a curve ball, whereby the training ball will fly with 12-6 spin toward the pitcher's target if the training ball is properly thrown.

U.S. Patent Number 5,827,138

Inventor: Ramsay M. Barrett

Issued: October 27, 1998

A game played on either an indoor/outdoor court. The game includes a bat, a game ball and two sets of balls which are of different colors. The bat has a substantially round drive head with which to bat balls. A game ball is hit up the court. Then one player hits their ball up the court and as close to the game ball as possible. The game continues until all the balls are hit. Then the person or team with ball(s) closest to the game ball scores a point for each ball that rests closer to the game ball than the closest ball of the opposite side or team

U.S. Patent Number 5,984,813

Inventor: Douglas W. Cinnella

Issued: November 16, 1999

An instructional baseball for teaching the proper manner of throwing a curve ball. The instructional baseball comprises a generally spherical ball having a continuous seam on the surface, said seam defining a horseshoe-shaped boundary for each of four area on the surface of the ball, and a depression within each of the areas, each of the depressions having substantially the same volume.

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There are numerous apparatus and methods for ball type games and baseball type games that provide recreation, sports and batting practice. While such apparatus and methods may be suitable for the purposes for which they were designed, they would not be as suitable for the purposes of the present invention, as hereinafter described.

It is thus desirable to provide methods and apparatus for a ball type game /baseball type game that provides recreation and batting practice. It is further desirable to provide methods and apparatus that improve the batting average of the players as such methods and apparatus are used more frequently.

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SUMMARY OF THE PRESENT INVENTION

A primary object of the present invention is to provide methods and apparatus that will improve the hitting proficiency of the players at bat.

Another object of the present invention is to provide methods and apparatus that are recreational and fun to play.

Yet another object of the present invention is to provide methods and apparatus that may increase the hand-to-eye coordination of the player at bat.

Still yet another object of the present invention is to provide methods and apparatus that may be adapted for diverse ball type game training camps, in order for them to increase the overall effectiveness and efficiency of there players.

Yet another object of the present invention is to provide methods and apparatus that may be incorporated by professional ball type game teams, in the hopes to increase the effectiveness and efficiency of their team.

Additional objects of the present invention will appear as the description proceeds.

The apparatus provided is a modified ball and a modified bat. The modified ball is approximately one-half of a conventional rubber ball. The modified ball when thrown will react in a predictable manner depending on how the modified ball is held and thrown. As the modified ball travels towards the batter, the airflow acting upon the curved and planar surface of the ball tends to exaggerate the ball's motion when compared to that of a typical ball, thereby making it easier to throw various standard pitches, such as a curveball.

The modified ball along with the instructions on pitching described in

the present invention provides a pitcher not proficient in the pitches of conventional baseball with the means to more easily deliver various types of pitches to the batter.

A pitcher using the modified ball pitches to a batter who attempts to hit the ball with a bat. The pitcher, using the modified ball, selectively varies the type of pitch, such as, curveball, fastball, screwball, knuckleball, slider, sinkerball, rising fastball and a splitfinger fastball according to the method as disclosed by the present invention.

The present invention provides a series of instructions that are used by the pitcher to delivery a particular type of pitch. These instructions when executed correctly will project the modified ball along a specific trajectory, producing one of the aforementioned standard pitches. This provides the batter with a more realistic and varied practice.

An additional aid is a modified bat. The batter, using the modified bat, attempts to anticipate the type of pitch by observing the pitcher's body movements. The batter will learn the art of observation through practice. The bat used in this training method differs from a regulation bat by being substantially smaller in diameter throughout its length, very much like a

broom handle. The bat requires a greater degree of accuracy on the part of the batter to hit the ball.

The role of the pitcher and batter may be rotated as seem fit by the individuals participating in the batting practice game.

Due to the distinctively different motion of the modified ball when compared to a typical baseball or softball, all forms of the game of baseball can be played utilizing the modified ball.

A baseball batting practice method is provided, comprising: selecting a spherical unit from which a segment has been removed to leave a unit comprised of an exterior spherical portion and a flat area, the removed segment being sized such that a perpendicular line from the center of the flat area to the opposite side of the remaining spherical portion is equal to or between forty-five and fifty-five percent of the original spherical unit diameter; gripping the unit in a manner to enable one of several standard pitches; initiating the throwing motion; moving the arm in a manner to enable the chosen standard pitch; and releasing the unit at a time and in a manner to enable the chosen pitch and to direct the unit to a target area in proximity to a human batter, to enable the human batter to attempt to identify standard

pitches and hit the unit with a bat and thereby improve the human batter's batting skills.

In another embodiment of the batting practice method, the removed segment is one-half of the original spherical unit.

In an embodiment of the batting practice method, the bat is a typical baseball bat.

In an embodiment of the batting practice method, the bat is a thinner than a typical baseball bat.

In an embodiment of the batting practice method, the bat has a substantially constant diameter, the diameter being smaller than a typical baseball bat in the designated hitting portion of the typical baseball bat.

In an embodiment of the batting practice method, the standard pitches comprise a fastball, knuckleball, screwball, slider, curveball, sinkerball, splitfinger fastball, and rising fastball.

In an embodiment of the batting practice method, the chosen standard pitch is the fastball, the unit is gripped vertically and released straight overhand.

In an embodiment of the batting practice method, the chosen standard

pitch is the knuckleball, the unit is gripped by placing the flat area of the unit in the palm of the throwing hand and thrown and released straight overhand.

In an embodiment of the batting practice method, the chosen standard pitch is the screwball, the unit is gripped vertically, thrown underhand, and released while twisting the hand to the right (for right hand throwers) or to the left (for left hand throwers).

In an embodiment of the batting practice method, the chosen standard pitch is the slider, the unit is gripped vertically and thrown and released at the three-quarter side arm position.

In an embodiment of the batting practice method, the chosen standard pitch is the curveball, the unit is gripped vertically and thrown and released at the one-half side arm position.

In an embodiment of the batting practice method, the chosen standard pitch is the sinkerball, the unit is gripped with the flat area up and thrown and released at the one-half side arm position.

In an embodiment of the batting practice method, the chosen standard pitch is the splitfinger fastball, the unit is gripped with the flat area up and thrown and released at the three-quarter side arm position.

In an embodiment of the batting practice method, the chosen standard pitch is the rising fastball, the unit is gripped with the flat area down, thrown one-half side arm, and released while slightly tilting the unit forward.

In an embodiment of the batting practice method, the unit is constructed from rubber.

In an embodiment of the batting practice method, the method further comprises providing an instructional table describing the grips, arm movements and release methods for the various standard pitches, for pitcher enablement, and for the batter to learn to identify the standard pitches associated with arm movements, to enable the batter to improve by recognizing the arm movement while batting and anticipating the standard pitch associated with the identified arm movement.

In an embodiment of the foregoing the instructional table includes illustrations of arm positions.

In an embodiment of the foregoing the instructional table includes illustrations of ball gripping positions.

A substitute game apparatus for playing baseball is provided, comprising a modified ball, the ball comprising a spherical unit from which a

segment has been removed to leave a unit comprised of an exterior spherical portion and a flat area, the removed segment being sized such that a perpendicular line from the center of the flat area to the opposite side of the remaining spherical portion is equal to or between forty-five and fifty-five percent of the original spherical unit diameter.

In an embodiment of the foregoing, the apparatus further comprises a modified bat, the bat having a substantially constant diameter, the diameter being smaller than a typical baseball bat in the designated hitting portion of the typical baseball bat.

A method for playing baseball is provided, comprising: substituting, for the ball, a modified ball, the modified ball comprising a spherical unit from which a segment has been removed to leave a unit comprised of an exterior spherical portion and a flat area, the removed segment being sized such that a perpendicular line from the center of the flat area to the opposite side of the remaining spherical portion is equal to or between forty-five and fifty-five percent of the original spherical unit diameter; and playing the game using the modified ball.

In an embodiment of the foregoing method, the method further

comprises substituting, for the bat, a modified bat, the modified bat having a constant diameter and playing the game using the modified bat.

A modified ball is provided for a game in which a player attempts to strike the ball with a hitting device, the ball comprising a spherical unit from which a segment has been removed to leave a unit comprised of an exterior spherical portion and a flat area, the removed segment being sized such that a perpendicular line from the center of the flat area to the opposite side of the remaining spherical portion is equal to or between forty-five and fifty-five percent of the original spherical unit diameter.

The foregoing and other objects and advantages will appear from the description to follow. In the description reference is made to the accompanying drawing, which forms a part hereof, and in which is shown by way of illustration specific embodiments in which the invention may be practiced. These embodiments will be described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that other embodiments may be utilized and that structural changes may be made without departing from the scope of the invention. In the accompanying drawing, like reference characters designate the same or similar parts throughout the several views.

The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is best defined by the appended claims.

BRIEF DESCRIPTION OF THE DRAWING FIGURES

In order that the invention may be more fully understood, it will now be described, by way of example, with reference to the accompanying drawing in which:

FIGURE 1 is an illustrative view of the present invention in use.

FIGURE 2 is a perspective view of the modified ball of the present invention.

FIGURE 3 is a perspective view of the modified bat of the present invention.

FIGURE 4 is an illustrative view of a batter using the modified bat of the present invention.

FIGURE 5 is a chart showing the methods employed by the present invention for pitching the standard pitches using the modified ball.

FIGURE 6 is an illustrative view of a pitcher using the method of pitching the ball as described in the accompanying chart.

FIGURE 7 is a side view of a spherical unit with line d depicting the diameter of the unit.

FIGURE 8 is a side view of the spherical unit of FIGURE 7 with a segment removed leaving the flat area shown, with line d' being perpendicular to the flat area, line d' otherwise corresponding to the line d of FIGURE 7.

FIGURE 9 is a side view of the spherical unit of FIGURE 7 with a segment removed leaving the flat area shown, with line d'' being perpendicular to the flat area, line d'' otherwise corresponding to the line d of FIGURE 7.

FIGURE 10 is a side view of the spherical unit of FIGURE 7 with a segment removed leaving the flat area shown, with line d''' being perpendicular to the flat area, line d''' otherwise corresponding to the line d of FIGURE 7.

TOP SECRET//COMINT

DESCRIPTION OF THE REFERENCED NUMERALS

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, the figures illustrate the Apparatus and Methods for Batting Practice And Playing Baseball of the present invention. With regard to the reference numerals used, the following numbering is used throughout the various drawing figures.

- 10 modified ball of the present invention
- 12 modified bat of the present invention
- 14 batter
- 16 pitcher
- 20 spherical unit portion
- 22 flat area
- 24 bat shaft
- 26 instruction materials
- 28 one-half side arm motion
- 30 overhand arm motion

- 32 underhand arm motion
- 34 three-quarter arm motion

DETAILED DESCRIPTION OF THE PREFERRED
EMBODIMENTS

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, **FIGURES 1-10** illustrate the Apparatus and Methods for Batting Practice And Playing Baseball of the present invention indicated generally by the numerals **10** and **12**.

The apparatus of the present invention **10,12** are shown generally in **FIGURES 1-8**, and in use in **FIGURES 1, 4 and 6**.

The apparatus includes a modified ball **10** and a modified bat **12**, for use by a batter **14** and pitcher **16**.

The ball **10** is formed from a spherical unit **20** with a segment removed leaving a flat area **22**. The original spherical unit in the preferred embodiment has a diameter substantially equal to a typical baseball. Such diameter is represented by line **d** on **FIGURE 7**. Following the removal of

the segment, a perpendicular line from the center of the flat area **22** will be shorter than line **d**. As shown in **FIGURES 8-10**, lines **d'**, **d''**, and **d'''** represent the lengths of such a perpendicular line where the length of line **d'** is 45 percent of line **d**, the length of line **d''** is 50 percent of line **d**, and the length of **d'''** is 55 percent of line **d**, respectively. The embodiments of **FIGURE 8** and **FIGURE 10**, represent the ends of the optimal range with respect to the size of the remaining spherical portion **20**. **FIGURE 9** represents the 50 percent configuration of the preferred embodiment. The modified ball **10** in the preferred embodiment is made of rubber.

The modified bat **12** is depicted in **FIGURE 3**. The modified bat **12** has a wood shaft **24** with a constant shaft diameter that is substantially smaller than the hitting portion of a typical adult baseball bat. In the preferred embodiment, the diameter is approximately 0.75 inches. A length of approximately 38 to 40 inches is chosen for the preferred embodiment.

The half-ball, or near half-ball, configuration adds a new dimension to the game of baseball, due to its exaggerated movements relative to the typical baseball. Using the throwing techniques shown in **FIGURE 5** enables the pitcher **16** to achieve standard pitches much more easily than with a typical

baseball, making each batter appearance at the plate, more interesting, especially in younger age competition, where the variety of pitches enabled, are not usually achievable. The standard pitches include the fastball, knuckleball, screwball, slider, curveball, sinkerball, splitfinger fastball, and rising fastball.

Furthermore, the modified ball's **10** response to contact with the ground, fences and the bat will be erratic, thus adding an increased element of unpredictability to the game. Playing under Official Baseball Rules and other sanctioning authorities' rules, with the modified ball and/or the modified bat is an aspect of my invention that provides significant entertainment and challenge.

In addition, the modified bat **12** provides an additional challenge to the batter **14**, since his or her swing must be more accurate than when using a typical baseball bat.

Because the modified ball **10** enables pitchers **16** of lesser skill to throw the standard pitches, the modified ball **10** is particularly useful in batting practice. The batter in training needs to gain an understanding of how the various pitches appear as they leave the pitcher **16**. Without a highly

developed pitcher to throw such pitches with a typical baseball, the batter 14 will usually see such pitches only in the actual game, or by sharing such pitchers during practice with numerous other players. Since pitchers of lesser skill can throw the standard pitches with the modified ball 10, a larger number of practice pitchers becomes available, such that more batters get to practice against such pitchers more often.

Since the arm movements 28,30,32,34 utilized for throwing the standard pitches with the modified ball 10 are similar to the arm movements for corresponding pitches using a conventional baseball, the batter 14 can also enhance his or her skills by developing an ability to concentrate on the pitcher's 16 arm motion 28,30,32,34. By doing so, the batter 14 can ascertain the type of pitch before the ball leaves the pitcher's 16 hand. This skill is best developed through repetitive practice with a mix of the standard pitches being thrown. As indicated above, the modified ball 10 allows more pitchers to be able to participate in this exercise, to the benefit of the entire team.

DWS A27 Batting practice is also enhanced by the provision of the modified bat

12. Due to its smaller diameter the modified bat 12 makes the batter to use a ← more accurate swing in order to make contact.

FIGURE 5 includes the content of instructional material 26 that accompanies the modified ball 10 and modified bat 12. Such material 26, can be used by the novice pitcher 16 to more quickly learn to take advantage of the enhanced throw properties of the modified ball 10. The techniques for each standard pitch are described in terms of grip, arm motion and release. The illustration of **FIGURE 6**, or a similar one, can be included in such materials 26 to add a visual aspect to the training program. Similarly, the batter 14 uses the materials 26 to begin the memorization process as to the particular arm motions associated with a particular standard pitch.

FIGURE 5 describes the pitching methods for using the modified ball 10 in batting practice or a game of baseball. **FIGURE 6** depicts the arm positions and some of the ball grip techniques referenced in **FIGURE 5**. For example, **FIGURE 5** indicates that, to throw a curveball, the pitcher 16 would grip the modified ball 10 ("halfball" in **FIGURE 5**) vertically, and release it during a one-half side arm motion. When the disclosed method is used, the modified ball 10 will travel in a curveball path. Arm 28 is in the

one-half side arm motion, as depicted in **FIGURE 6**.

For a fastball, the pitcher **16** grips the modified ball **10** vertically, and releases it during a straight overhand arm motion. When the disclosed method is used, the modified ball **10** will travel in a fastball path. Arm **30** is in the straight overhand arm motion, as depicted in **FIGURE 6**.

For a knuckleball, the pitcher **16** grips the modified ball **10** with the flat area (“cut side” in **FIGURE 5**) in the palm of the hand, and releases it during a straight overhand arm motion. When the disclosed method is used, the modified ball **10** will travel in a knuckleball path. Arm **30** is in the straight overhand arm motion, as depicted in **FIGURE 6**.

For a screwball, the pitcher **16** grips the modified ball **10** vertically and releases it during an underhand arm motion, twisting the throwing hand to the right upon release. When the disclosed method is used, the modified ball **10** will travel in a screwball path. Arm **32** is in the underhand arm motion, as depicted in **FIGURE 6**. A left handed pitcher will twist his or her hand to the left as the ball is released.

For a slider, the pitcher **16** grips the modified ball **10** vertically and releases it during a three-quarter side arm motion. When the disclosed

method is used, the modified ball **10** will travel in a slider path. Arm **34** is in the three-quarter side arm motion, as depicted in **FIGURE 6**.

For a sinkerball, the pitcher **16** grips the modified ball **10** with the cut side up, and releases it during a one-half side arm motion. When the disclosed method is used, the modified ball **10** will travel in a sinkerball path. Arm **28** is in the one-half side arm motion, as depicted in **FIGURE 6**.

For a splitfinger fastball, the pitcher **16** grips the modified ball **10** with the cut side up, and releases it during a three-quarter side arm motion. When the disclosed method is used, the modified ball **10** will travel in a splitfinger fastball path. Arm **34** is in the three-quarter side arm motion, as depicted in **FIGURE 6**.

For a rising fastball, the pitcher **16** grips the modified ball **10** with the cut side down, and releases it during a one-half side arm motion, slightly tilting the modified ball forward upon release. When the disclosed method is used, the modified ball **10** will travel in a rising fastball path. Arm **28** is in the one-half side arm motion, as depicted in **FIGURE 6**.

Although particular bat sizes and materials for the ball and bat have been discussed, other sizes and materials are also possible, such as

correspondingly smaller diameter and length bats for smaller players, bats made from aluminum and other composites from which bats are typically constructed, and modified balls made from plastics and other materials from which baseballs are typically constructed, all in accordance with the present invention, and as determined by the intended end use for the overall device **10** and **12**, as will occur to those of skill in the art upon review of the present disclosure..

It will be understood that each of the elements described above, or two or more together may also find a useful application in other applications differing from that described above.

While certain novel features of this invention have been shown and described and are pointed out in the annexed claims, it is not intended to be limited to the details above, since it will be understood that various omissions, modifications, substitutions and changes in the forms and details of the device illustrated and in its operation can be made by those skilled in the art without departing in any way from the spirit of the present invention.

Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can, by applying current knowledge, readily adapt it for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention.